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Pearne & Gordon LLP 1801 East 9th Street Suite 1200 Cleveland, OH 44114-3108			COONEY, JOHN M	
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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/576,033
Filing Date: April 14, 2006
Appellant(s): MILLIREN, CHARLES M.

J. Gregory Chrisman
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 12-6-10 appealing from the Office action
mailed 5-26-10.

(1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application:

Claims 35-37, 39-48 and 51-68 are pending and rejected.

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

(6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the

subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

It is noted that an objection to the amendment of the specification filed 12-17-08 has been made and is maintained herein.

(7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

(8) Evidence Relied Upon

2004/0266897 APICHATACHUTAPAN ET 12-2004

AL.

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Specification

The amendment filed 12-17-08 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: The subject matter added to paragraph [0048] constitutes new matter.

As to paragraph [0048], though the figure identified by appellants may include a value or values falling within the ranges of values encompassed by the subject added to

the supporting disclosure, it is not seen to provide support for the subject matter as now recited in appellants' specification.

Appellant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 66-67 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The recited impact properties and indicated recoverability and strength retention values as recited in appellants' claims are not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Support for the recitations of these claims is not seen to be adequately provided for by appellants' disclosure at paragraphs [0007],[0018], or from the Tables, Examples, or Figures of appellants' originally filed supporting disclosure.

This is a new matter rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 35-37, 39-48 & 51-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Apichatachutapan et al.(2004/0266897).

Apichatachutapan et al. discloses preparations of viscoelastic polyurethane foam preparations wherein isocyanates having isocyanate content values as claimed by appellants are combined and reacted with polyol compositions including polyether polyols based on glycerols, amines, alkanolamines, and other initiators prepared from propylene oxide to the degrees required by the claims, and wherein the compositions are combined at an NCO index as defined by the claims and in the presence of water, various catalyst which are encompassing of those claimed, and additives (see abstract, paragraphs [0015]-[0040], as well as, the entire document). Apichatachutapan et al.'s preparations exhibit impact and strength properties which are not seen to differentiate from those of appellants' claims based on the materials and make-ups of the preparations claimed.

Apichatachutapan et al. differs from appellants' claims in that it does not specifically require that amine based polyether polyols be employed in their preparations. However, Apichatachutapan et al. does recite that amine initiators, and,

particularly, the specific amines of appellants claims, can be used in the practice of their invention for the purpose of providing adequate isocyanate reactive components(see paragraph [0024]-[0027]). Accordingly, it would have been obvious for one having ordinary skill in the art to have employed the amine initiators disclosed by Apichatachutapan et al. in the preparations of Apichatachutapan et al. in blended combinations for the purpose of providing their isocyanate reactive effect in the preparations of Apichatachutapan et al. in order to arrive at the products and/or processes of appellants' claims with the expectation of success in the absence of a showing of new or unexpected results.

Additionally, the reference provides disclosure of glycerine-based polyether polyols and NCO indexes as claimed and distinction based on these elements is not seen. Further, patentable distinction is not seen based on the inclusion of black paste of appellants' claims, because inclusion of pigmented fillers for coloration and reinforcement is well known to practitioners in the art, and their inclusion within the preparations of Apichatachutapan et al. for such purposes would have been obvious to one having ordinary skill in the art.

Also, regarding variations in amounts of respective reactant and additive components, it has long been held that where the general conditions of the claims are disclosed in the prior art, discovering the optimal or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233; *In re Reese* 129 USPQ 402 . Further, a *prima facie* case of obviousness has been held to exist where the proportions of a reference are close enough to those of the claims to lead to an expectation of the same

properties. *Titanium Metals v Banner* 227 USPQ 773. (see also MPEP 2144.05 I)

Similarly, it has been held that discovering the optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272,205 USPQ 215 (CCPA 1980).

(10) Response to Argument

Appellants' arguments have been considered. However, rejections and objection are maintained.

Appellants' arguments pertaining to the rejection under 35 USC 103 have been considered. However, rejection is maintained. Apichatachutapan et al. is concerned with the formation of viscoelastic foams which by their nature of being viscoelastic are deformable on application of force and recoverable upon removal of said force. The terminology "semi-rigid", from the standpoint of patentability, is not sufficient in distinguishing the claimed foams and processes from the foamed products and processes of the cited prior art. That the cited teachings recite additional and alternative material combinations beyond there preferred and exemplified embodiments does not derogate from what is fully taught or fairly suggested by the entirety of their disclosures. Though the effect of being "flexible" versus "rigid" may be distinguishable from the standpoint of patentability in differentiating polyurethane foams, "semi-rigid", from the standpoint of patentability, falls somewhere between the two extremes without specific demarcation of when a flexible or rigid foam goes from being "rigid" or "flexible" to being "semi-rigid". Accordingly, without unobvious difference being established based

on the material constitution of the instantly claimed invention, patentable distinction between Apichatachutapan et al. and appellants' claims is not seen. It is maintained that the differences in the material features of appellants' claims are addressed in the rejection above, and appellants have not demonstrated patentable, unobvious difference to be evident in their claims.

It is maintained that the limitations pertaining to amine-basis and alkylene oxide make-up are adequately addressed by the grounds of rejection set forth above, and appellants' assertions that the references lack specificity regarding these features are insufficient in overcoming the *prima facie* position of obviousness that is maintained to be evident. It is maintained that Apichatachutapan et al. particularly identifies employment of polyols having no ethylene oxide extension units (paragraph [0025]). Additionally, the amine polyols of appellants' claims are provided for by the fair suggestions of Apichatachutapan et al.'s disclosure from its disclosed second isocyanate reactive component (see paragraphs [0023], [0025] & [0029]) wherein its disclosure allows for overlap in amount, OH number and initiator selection (and, accordingly, functionality, which is dictated by initiator selection). Further, it is held and maintained that the fully considered teachings and fair suggestions of Apichatachutapan et al. are not limited solely to what is disclosed by its exemplified embodiments. The disclosures and embodiments beyond the specific exemplified embodiments of Apichatachutapan et al.'s are maintained to be appropriately looked to in assessing what is taught and/or fairly suggested by the fully considered cited prior art. It is held and maintained that the differences pointed to in the exemplified embodiments and the

identification that components may not be required do not substitute for a fact based showing of new or unexpected results attributed to differences in the claims.

On review of the evidence of the showing of new or unexpected results, the following must be considered:

Claims Must be Commensurate With Showings:

Evidence of superiority must pertain to the full extent of the subject matter being claimed. *In re Ackerman*, 170 USPQ 340; *In re Chupp*, 2 USPQ 2d 1437; *In re Murch* 175 USPQ 89; *Ex Parte A*, 17 USPQ 2d 1719; accordingly, it has been held that to overcome a reasonable case of *prima facie* obviousness a given claim must be commensurate in scope with any showing of unexpected results. *In re Greenfield*, 197 USPQ 227. Further, a limited showing of criticality is insufficient to support a broadly claimed range. *In re Lemlin*, 161 USPQ 288. See also *In re Kulling*, 14 USPQ 2d 1056.

Results Must be Unexpected:

Unexpected properties must be more significant than expected properties to rebut a *prima facie* case of obviousness. *In re Nolan* 193 USPQ 641 CCPA 1977.

Obviousness does not require absolute predictability. *In re Miegel* 159 USPQ 716.

Since unexpected results are by definition unpredictable, evidence presented in comparative showings must be clear and convincing. *In re Lohr* 137 USPQ 548.

In determining patentability, the weight of the actual evidence of unobviousness presented must be balanced against the weight of obviousness of record. *In re Chupp*, 2 USPQ 2d 1437; *In re Murch* 175 USPQ 89; *In re Beattie*, 24 USPQ 2d 1040.

Appellants' have not persuasively demonstrated unexpected results for the products and processes of their claims. Appellants have not demonstrated their results to be unexpected and more than mere optimizations of the knowledge in the art or more significant than being secondary in nature. Further, appellants' have not demonstrated their showing to be commensurate in scope with the scope of combinations now claimed.

The submitted declaration has been considered. However, the assertions of this declaration do not substitute for a fact based showing of new or unexpected results attributable to differences in their claims that are commensurate in scope with the scope of the claims. Hereto it is maintained and reiterated that the terminology "semi-rigid", from the standpoint of patentability, is not sufficient in distinguishing the claimed foams and processes from the foamed products and processes of the cited prior art.

As to appellants' arguments specific to claim 51, it is held and maintained that Apichatachutapan et al. makes clear provisions for the employment of triethanolamine as initiator in forming the preparations of their disclosure (see again paragraphs [0023]-[0029]). It is maintained that such a material selection is within the purview of the ordinary practitioner in practice of the invention taught or fairly suggested from the teachings of Apichatachutapan et al. Further, selection of the amounts of such a

reactant material for its reactive effects is a routine modification of Apichatachutapan et al.'s teaching that would have been within the skill of an ordinary practitioner in the art. Similarly, the additional selection of ethanolamine, identified in appellants' claim 52, as an initiator along with triethanolamine is within the purview of the ordinarily skilled practitioner in that Apichatachutapan et al. provides for the selection of either or both of these initiators in paragraph [0023] and allows for the employment of multiple polyols from these identified initiators in their preparations ([0023]-[0030]). Examiner's positions here apply also to appellants' arguments regarding claim 68. However, it stands to be reiterated here also that a referenced disclosure is not limited solely to what is set forth in its examples. It is maintained that selection of triethanolamine as an initiator in forming a polyol to be used in the preparations of Apichatachutapan et al. is an operation adequately provided for by the teachings and fair suggestions of Apichatachutapan et al. based on the full teachings of Apichatachutapan et al. including the detailed description of the invention that accompanies the exemplified embodiments.

As to the qualitative features set forth in claims 66 & 67, it is held and maintained that any physical differences in the make-up of the products of the instant concern are addressed in the rejection above. Apichatachutapan et al. provides for the formation of good, viscoelastic, recoverable articles within the fully considered teachings of their disclosure. The qualitative properties of appellants' claims 66 & 67 are seen to be intrinsic properties possessed by articles formed or fairly suggested from the teachings and fair suggestions of Apichatachutapan et al.'s fully considered disclosure unless an

identification of unobvious differences in the physical make-up of the products of the claims can be associated with the qualitative features set forth in the claims. At this time such a showing or demonstration has not been sufficiently set forth.

Appellants' arguments regarding the rejection of claims 66-67 under 35 USC 112 1st paragraph have been considered. However, rejection is maintained.

It is maintained that the originally filed supporting disclosure, including the figures, does not provide support for the ranges of values now encompassed by appellants' claims. It is held and maintained that it is not seen that the originally filed supporting disclosure provides support for the specific values now claimed. Further, it is not seen that the originally filed supporting disclosure provides support for the specific values now claimed for the range of compositions encompassed by the claims. The originally filed supporting disclosure, including Figure 1, lacks support for the now claimed invention set forth in claims 66-67. The graphical representation of the identified performance characteristics of the sample of example 1 are based upon the observation of exact values from which a graph is then created. These actual observations from which a graph was prepared were observed for a specific composition, the composition of foam 2 from example 1. These observations of the behavior of the sample of example 1 when exposed to certain and specific test operations can not be extrapolated to be observations that could be attributed to any other composition of the instant concern other than the specific composition to which the testing was performed. These results can not be assumed or expected of the other

seven foams of Example 1 or the additional foams ten foams of example 3, nor can the results be assumed or expected of any foam having the accompanying limitations of appellants' claims 66 & 67 other than the specific foam composition of Foam #2 of Example 1.

Additionally, the position is taken that the examples are only suitable to provide support for the exemplified values as they pertain to the exemplified compositions. Appellants have not established that they were in possession of the claimed ranges of values prescribed by the claims through the use of the term "about" for the full scope of compositions encompassed by the claims at the time of filing. Furthermore, in view of the use of "about" to set forth ranges of values, it cannot be said that the claimed ranges of values set forth through the use of the term "about" can be appropriately gleaned from the graphical representation of observations made upon performing a particular action upon one specific composition. Here, also, it is seen and maintained that, although it is acceptable that appellants' omit the specific observations used to generate the graphical representation of Figure 1, appellants are not lent support for ranges of values that may arise from the ambiguities of their disclosure.

It is held and maintained that the originally filed supporting disclosure, including Figure 1, lacks support for the invention of claims 66 & 67 as now claimed. The graphical representation of the identified performance characteristics of the sample of example 1 are based upon the observation of exact values from which a graph is then created. Appellants' omission of these specific values used in generating the graphical representation of Figure 1, though acceptable for filing their originally filed supporting

disclosure, does not lend them license after filing to argue that the representation of Figure 1 is supportive of the ranges of values now claimed.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

John M. Cooney, Jr.

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